

All IDU's & ODU's rated for 208/230v 1 Ph.  
All communication wiring is 18/2 Stranded. Shielding is not required.

## Outdoor Units

Model Number	Nominal Capacity	SEER2	EER2	HSPF2	Min/Max Connections	Pipe Connections	Max Lift (ft.) ODU Above/ODU Below	Min Line Length (ft.) (Actual)	Max Line Length (ft.) (Actual)	Factory Charge	Standard MCA*	Standard MOP*	Rated Cooling / Heating	Operating Range	AHRI Number	Outdoor Dimensions	
<b>Ultra Heating Models (SYSTEM PERFORMANCE Non-Ducted/Ducted/Mixed Indoor Units)</b>																	
GMV-V36WL/NhC-T(U)	36,000	23.5 / 18 / 20.75	14.5 / 12.5 / 13.5	9.8 / 9.1 / 9.45	1/7	3/8x5/8	164/131	10	492	8.6	36	40	36,000 / 45,000	-22 - 129°F	217123443 217123424 217127984	3 / 4 / 5 Ton 35-3/8 x 53 x 13-3/8 (W/H/D)	
GMV-V48WL/NhC-T(U)	48,000	23.5 / 18 / 2075	13.5 / 11.7 / 12.6	9 / 8.8 / 8.9	1/8	3/8x5/8	164/131	10	492	8.6	38	40	48,000 / 54,000	-22 - 129°F	217123444 217123425 217127985	 *The units carry dual ratings. The outdoor unit can be used to provide power to the IDU(s) using the factory supplied terminal block in the ODU. If utilized the MOP would be 60A	
GMV-V60WL/NhC-T(U)	60,000	22.5 / 17.5 / 20	10.5 / 9.5 / 10	9.2 / 8.7 / 8.95	1/10	3/8x5/8	164/131	10	492	8.6	39	40	60,000 / 64,500	-22 - 129°F	216772249 216772305 217115272		

## Common Indoor Units Indoor units can be field converted to desired capacity. See chart below for limitations:

Wall Mount	Compact Cassette	Standard Cassette	One Way Cassette	Slim Ducted	AHU Models	Multi Position Air Handler	Reference product submittal for Electric Heater Kit size requirements	
					<b>AHU Models</b>			
GMV-ND09G/NhA1C-T(U) Selectable Capacities: GMV-ND06G/NhA1C-T(U) GMV-ND07G/NhA1C-T(U)	GMV-ND12T/NhE-T(U) Selectable Capacities: GMV-ND05T/NhE-T(U) GMV-ND07T/NhE-T(U) GMV-ND09T/NhE-T(U)	GMV-N24T/NhD-T(U) Capacity is Not Adjustable	GMV-ND12TD/NhA-T(U) Selectable Capacities: GMV-ND07TD/NhA-T(U) GMV-ND09TD/NhA-T(U)	GMV-ND12PHS/NhD-T(U) Selectable Capacities: GMV-ND07PHS/NhD-T(U) GMV-ND09PHS/NhD-T(U)	GMV-ND18A/NhB-T(U) Selectable Capacities: GMV-ND12A/NhB-T(U)		<b>Model</b>	
GMV-ND12G/NhA1C-T(U) Selectable Capacities: GMV-ND14G/NhA1C-T(U)	GMV-ND18T/NhD-T(U) Selectable Capacities: GMV-ND15T/NhE-T(U)	GMV-ND48T/NhD-T(U) Selectable Capacities: GMV-ND30T/NhD-T(U) GMV-ND36T/NhD-T(U) GMV-ND42T/NhD-T(U)	GMV-ND24PHS/NhD-T(U) Selectable Capacities: GMV-ND15PHS/NhD-T(U) GMV-ND18PHS/NhD-T(U)	GMV-ND24A/NhB-T(U) Capacity is not Adjustable	LYQ-08-A	FLEXA2LHTR05KWD	320004060249	
GMV-ND24G/NhA1C-T(U) Selectable Capacities: GMV-ND18G/NhA1C-T(U)	Compact Grille	Standard Grille	One Way Grille	GMV-ND30PHS/NhD-T(U) Selectable Capacities: GMV-ND36PHS/NhD-T(U) GMV-ND42PHS/NhD-T(U) GMV-ND48PHS/NhD-T(U)	GMV-ND30A/NhB-T(U) Capacity is not Adjustable	LYQ-08-C	FLEXA2LHTR10KWD	320004060250
	TF05	TF06	TD01	GMV-ND42A/NhB-T(U) Selectable Capacities: GMV-ND36A/NhB-T(U)	GMV-ND42A/NhB-T(U) Selectable Capacities: GMV-ND36A/NhB-T(U)	LYQ-08-D	FLEXA2LHTR15KWD	320004060251
				GMV-ND60A/NhB-T(U) Selectable Capacities: GMV-ND48A/NhB-T(U) GMV-ND54A/NhB-T(U)	GMV-ND60A/NhB-T(U) Selectable Capacities: GMV-ND48A/NhB-T(U) GMV-ND54A/NhB-T(U)	LYQ-08-E	FLEXA2LHTR20KWD	320004060252

## Combination Rules

Outdoor Unit Model	Max IDU Connected	Min IDU Connected Capacity (BTU) (50%)*	Max IDU Connected Capacity (BTU) (135%)*	
GMV-V36WL/NhC-T(U)	7	18000	48600	Use the MultiPRO Selector software available at GreeComfort.com for systems using multiple Y-Branches, multiple headers, or combinations of Y-Branches and Headers. See "Basic Piping Rules Defined" below. *For systems above 125%, the MultiPRO Selector software must be used, which can be found on GreeCommercial.com
GMV-V48WL/NhC-T(U)	8	24000	64800	
GMV-V60WL/NhC-T(U)	10	30000	81000	

	Wireless remote control (Included with Ductless Units).		Included with ducted units and is optional for others. Controller with 7-day programmable function, Max. Indoor unit connectable is 16.		Enables centralized local control. Can control and monitor up to 16 MultiPRO systems with up to 255 indoor units. Expanded option also available. Enables 7-Day programming, grouping, and function lockout.			Enables the use of third-party 24V thermostat and other control systems that utilizes dry contacts.
YAP1F PART NO. GREE30510589	XE7C-23/H PART NO. GREEXE7C23H	CE52-24/F Central Controller	ME32-33/H 24V And Dry Contact Adaptor Use with a 1-Heat, 1-Cool Third Party Conventional Thermostat	ME32-23/H 24V And Dry Contact Adaptor Use with a 2-Heat, 1-Cool Third Party Conventional Thermostat				

\*This guide is to be used for reference only and is not intended to replace the Installation Instructions or the design software. Always read and follow the software outputs and the Installation Instructions.\*

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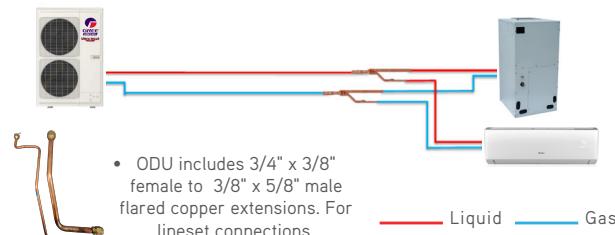
## Accessories

	Enables remote monitoring and control of MultiPRO systems with up to six indoor units via a plug-and-play device and iocControl app for smartphones.		Enables remote monitoring and control of up to 16 MultiPRO systems with up to 32 indoor units via a plug-and-play device and iocControl app for smartphones. Provides local BMS integration via BACnet IP/MSTP and/or Modbus RTU/TCP and Home Automation via Modbus IP/RTU/ASCII/Rest API		Enables remote monitoring and control of up to 16 MultiPRO systems with up to 255 indoor units via a plug-and-play device and iocControl app for smartphones. Provides local BMS integration via BACnet IP/MSTP and/or Modbus RTU/TCP and Home Automation via Modbus IP/RTU/ASCII/Rest API.		Enables remote monitoring and control of MultiPRO systems via a plug-and-play device and iocControl app for smartphones. Each controlled indoor unit requires one CoolPlug. Up to 16 IDU/CoolPlugs can connect to a CoolLinkHub.
<b>GMVCGA01</b>		<b>CoolMaster</b>		<b>CoolMasterPRO</b>		<b>CoolLinkHub+CoolPlug</b>	
	<b>Multi-Position Air Handler and Downflow Applications</b>  <b>Downflow capable, no kit required.</b>			Provides superior air filtration with low static pressure losses. For use with the following models and their corresponding, compatible filter boxes:			
				<b>GFBHS-2</b>	<b>GMV-ND(07, 09, 12, 15, 18, 24)PHS/NhD-T(U)</b>		
				<b>GFBHS-3</b>	<b>GMV-ND(30, 36 42, 48, 54)PHS/NhD-T(U)</b>		

## Refrigerant Piping Installation Guidelines &amp; Descriptions

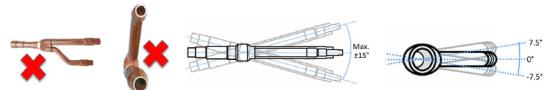
## Refrigerant Piping

- Heat Pump has two pipes, liquid and gas
- Both must be insulated
- System mode is set by a user-determined main indoor unit
- Twenty inches must be maintained between elbows, headers, and Y-branches



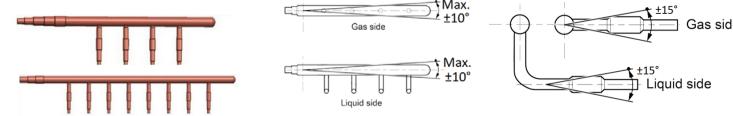
## Y-Branches

- Specially designed for even distribution of refrigerant
- Each kit includes one Y-Branch for gas and one Y-Branch for liquid
- Simply use a tubing cutter for larger line sets
- If installed horizontally, they must be level
- If installed vertically, they must be plumb
- FQ01A/A is used for downstream capacities of less than 68kBtu
- FQ01B/A is used for downstream capacities of more than 68kBtu



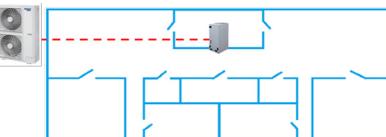
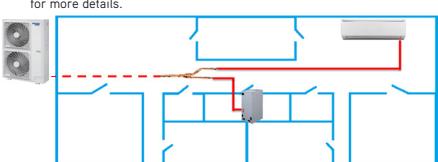
## Headers

- Specially designed for even distribution of refrigerant and oil
- Each kit includes one Header for gas and one Header for liquid
- Simply use a tubing cutter for larger line sets
- Must be installed horizontally and they must be level
- Liquid header is built with downward facing offset for installation next to gas header
- FQ14/H1 is used for 4 units or less
- FQ18/H1 is used for 8 units or less



## Basic Piping Rules Defined

Note: The following is a basic set of rules for piping lengths. The MultiPRO systems are capable of far greater lengths and more complex configurations. Use our MultiPRO System Builder, MultiPRO Selector, or see the installation manual for more details.

SINGLE ZONE		DUAL AND MULTIZONE														
Single Zone Piping Limits	3, 4, 5T	Model	Liquid	Gas												
	Ultra															
Max Length ODU to IDU: (Actual)	492'															
Max Height ODU Above IDU:	164'															
Max Height ODU Below IDU:	131'															
<b>Single Zone MultiPRO</b> The piping sizes are determined by the ODU		<b>Dual/Multi Zone Piping Limits</b> <table border="1"> <tr> <td>Model</td> <td>Liquid</td> <td>Gas</td> </tr> <tr> <td>3 Ton Outdoor Unit</td> <td>3/8"</td> <td>5/8"</td> </tr> <tr> <td>4 Ton Outdoor Unit</td> <td>3/8"</td> <td>5/8"</td> </tr> <tr> <td>5 Ton Outdoor Unit</td> <td>3/8"</td> <td>5/8"</td> </tr> </table> <p>If necessary, reduce the piping size at the indoor unit</p>			Model	Liquid	Gas	3 Ton Outdoor Unit	3/8"	5/8"	4 Ton Outdoor Unit	3/8"	5/8"	5 Ton Outdoor Unit	3/8"	5/8"
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